CITY COUNCIL COMMUNICATION



MEETING DATE: September 16, 2014 ITEM NUMBER: <ITEM OUTLINE>

SECOND READING: N/A

TYPE OF ITEM: Information

PRESENTED BY: Dale Rademacher, Director or Public Works and Natural Resources,

303-651-8355

Kim Shugar, Natural Resources, 303-651-8992

Daniel Wolford, Land Program Administrator, 303-774-4691

Rigo Leal, Public Information Office, 303-651-8840

SUBJECT/AGENDA TITLE: 2014 Mosquito Control Program

EXECUTIVE SUMMARY:

The 2014 Mosquito Control Program comes to a close with the last adulticide spot spraying application having taken place at Jim Hamm Park on August 28, 2014. The cooler/wetter weather conditions over the past four weeks resulted in a slow decline in the total numbers of mosquitoes trapped as well as a reduction in the abundance of Cullex mosquitoes being trapped. (See the attached adult trapping spreadsheet)

This season, the City worked with Boulder County Public Health Department, the Center for Disease Control (CDC), and Colorado Mosquito Control (CMC) to protect the community from the potential adverse effects of West Nile Virus for a total of \$74,735.48 (\$59,130.48 for our routine program and \$15,605 for the adulticide spot spraying). This cost also included five additional trap sites located throughout the City, as well as moving from a seven-day larvaciding cycle to a five-day cycle in an attempt to reduce the need for spraying.

COUNCIL OPTIONS: N/A

RECOMMENDED OPTIONS: N/A

FISCAL IMPACT & FUND SOURCE FOR RECOMMENDED ACTION:

The program cost for 2014 was \$74,735.48. Based upon the City's contract with Colorado Mosquito Control, it is anticipated that the cost for the 2015 program will increase by 2% for a total of \$76, 230.19.

BACKGROUND AND ISSUE ANALYSIS:

The City's 2014 integrated pest management program for mosquito control consisted of several components including:

Public education and outreach

Site monitoring and surveillance

Larvacide

Adulticide – Site Specific Spot Spraying

Citywide West Nile vector emergency spraying

PUBLIC OUTREACH AND EDUCATION

In addition to the public outreach and education currently conducted by the City and Colorado Mosquito Control (noted in the section below), staff provided additional public outreach and education in 2014, including the following notifications and venues:

PRINT:

- 1. *City Line* monthly newsletter mailed to all Longmont households (in English and Spanish)
- 2. City Talk weekly ad (every Monday) in the *Times-Call*
- 3. Employee Connection monthly employee newsletter
- 4. Ads –weekly ad in the *Times-Call* from Colorado Mosquito Control announcing spray zones
- 5. Brochures informational brochures in the Civic Center mall and other city facilities (in English and Spanish)
- 6. Fight the Bite information campaign sponsored by the State of Colorado and Boulder County (in English and Spanish)
- 7. Recreation Brochure quarterly newsletter mailed to all Longmont residents

VIDEO:

- 1. YouTube
- 2. Channel 8 24 hour government access channel (TV and web)
- 3. Channel 16 24 hour a day electronic bulletin board
- 4. City website

INTERNET:

- 1. West Nile Page www.ci.longmont.co.us/westnile/
- 2. News Release page www.ci.longmont.co.us/news/pr/index.htm
- 3. Video Dan Wolford explains City's pest control program w.ci.longmont.co.us/westnile/
- 4. Colorado Mosquito Control www.comosquitocontrol.com
- 5. Channel 8 www.longmontchannel.com/

SOCIAL MEDIA:

- 1. Facebook www.facebook.com/cityoflongmontco
- 2. Twitter @cityoflongmont
- 3. e-News weekly (Friday) news updates posted to social media sites

NOTIFICATION SYSTEM:

- 1. e-Alert email alert sent to all who subscribe
- 2. Shut-off request form at Colorado Mosquito Control website

OUTREACH:

- 1. Rhythm on the River information booth with brochures and mosquito repellant
- 2. Festival on Main information booth with brochures and mosquito repellant
- 3. Concerts in the Park staff provides mosquito repellant
- 4. Concerts at the Museum staff provides mosquito repellant
- 5. July 4 Jazz Festival staff provides mosquito repellant

RADIO:

- 1. Radio Station 1670 AM City-owned radio station broadcasts emergency messages 24 hours a day
- 2. La Lev radio in Longmont at 1170 AM (Spanish language radio)

SITE MONITORING/ SURVEILLANCE/ LARVACIDING

In 2014, the City increased its trapping /monitoring sites from 11 to 16 sites to enhance coverage in the City. Additionally in 2014, the City of Longmont transitioned from a seven (7) day larvaciding / surveillance cycle to a five (5) day cycle. The goal of the increased larvaciding program is to reduce the amount of spraying needed to control adult mosquitos. During peak times of the year and the hottest days of summer, certain species can develop from an egg to an adult in less than a week.

ADULTICIDE/SPOT SPRAYING

Spot spraying occurred when mosquito counts exceeded 100 and the presence of WNV+ mosquitos existed.

- The City provides 48 hour notice for spot spraying throughout the season, as compared to a 24 hour notice in 2013.
- Notification of weekly spot spraying was provided in the *Times-Call*, and provided via the eAlert email system and social network, as recommended in the citizen survey.
- Staff also posted the weekly Vector Index on the City's website to indicate severity over time.

ENHANCED AREA SPRAYING - Element not utilized during the 2014 season

- Staff implemented a new spraying effort (Enhanced Area Spraying) which was intended to be implemented prior to the City implementing the Citywide West Nile Virus Vector Emergency Spraying. Similar to the citywide spraying, the Enhanced Area Spraying would be based on a recommendation from Boulder County Public Health, which is based upon the Vector Index (VI) calculation. The program is targeted at specific breeding areas that are known to be high producers based upon the surveillance and monitoring data (trap counts and presence of WNV+ mosquitos). The enhanced areas, areas larger than the typical spot spraying areas, will be sprayed back to back with the intent to "knock down" all adult mosquitoes in that production zone. The Vector Index will continue to be monitored. Should the VI drop to an acceptable level, no further action will be required. Should the VI continue to rise and the Boulder County Public Health and the State of Colorado recommend a citywide spraying, the City will evaluate if it should move to the next step of a citywide spraying. Evidence in 2013 showed that the "Enhanced Area Program" proved to be equally as effective in dropping the Vector Index as did the citywide spraying at one-fourth of the expense.
- Had we implemented this phase, the City would have provided a 48 hour notification before implementation.
- Also during this phase the City and CMC would have honored shut-off requests.

CITY-WIDE WEST NILE VIRUS VECTOR EMERGENCY SPRAYING – Element not utilized during the 2014 season

 Citywide spraying would have been considered if a recommendation had been received from Boulder County Public Health and would have been based upon the Vector Index calculation and if Enhanced Spot Spraying was not successful in reducing the Vector Index.

- For citywide spraying, the City would have provided a 48 hour notification before implementation.
- Due to the nature of the emergency during a citywide spraying event, the City and CMC would **not** have honored any shut-off requests.

Annual Comparisons between 2013 Season and the 2014 Season		
2013	2014	
Human Cases for WNV in USA – 2,469	Human Cases for WNV in USA - 399	
Deaths due to WNV in USA - 119	Deaths due to WNV in USA - 16	
Human Cases for WNV in Colorado - 322	Human Cases for WNV in Colorado - 19	
Human Cases for WNV in Larimer Cty -89	Human Cases for WNV in Larimer Cty - 2	
Human Cases for WNV in Weld Cty - 43	Human Cases for WNV in Weld Cty - 6	
Human Cases for WNV in Boulder Cty -52	Human Cases for WNV in Boulder Cty - 4	
WNV + Mosquitoes in Colorado - 441	WNV + Mosquitoes in Colorado - 148	
WNV + in Larimer Cty - 213	WNV + in Larimer Cty - 59	
WNV + in Weld Cty - 76	WNV + in Weld Cty - 40	
WNV + in Boulder Cty - 69	WNV + in Boulder Cty - 15	
Miles Sprayed in Longmont – 1,120.8	Miles Sprayed in Longmont – 271.4	

Boulder, Weld and Larimer Counties continue to be the hotbed for mosquito production throughout the State of Colorado and Longmont finds itself in the midst of the hotbed.

Previous Years Expenditures Related to Mosquito Control			
Year	Base Program	Adulticide Program	Total Cost
2014	\$59,130.48	\$15,605.00	\$ 74,735.48*
2013***	\$54,660.00	\$62,210.15**	\$116,870.15
2012	\$61,186.78	\$ 6,530.00	\$ 67,716.78
2012	\$59,987.05	\$15,648.40	\$ 75,635.45
2011	\$58,810.83	\$ 6,032.00	\$ 64,842.83

^{*} This does not include the \$5,000 expenditure to perform the 2014 Longmont Mosquito Survey

ATTACHMENTS:

2014 Adult Trapping Spreadsheet by location and weekly Vector Index

^{** \$49,788.65} for Emergency City-Wide and Enhanced Spraying

^{***} Beginning of a new competitive bid cycle